

IN THE CLAIMS:

54. (Currently amended) A method for modulating proliferation of a plant cell comprising:

- (i.) introducing into the plant cell an expression cassette comprising an isolated nucleic acid molecule encoding a cell proliferation-related polypeptide, wherein the polypeptide binds in a yeast two hybrid assay to a fragment of a protein of selected from the group consisting of OsE2F1 (SEQ ID NO: 194), Os018989-4003 (SEQ ID NO: 2), OsE2F2 (SEQ ID NO: 10), OsS49462 (SEQ ID NO: 206), OsCYCOS2 (SEQ ID NO: 210), OsMADS45 (SEQ ID NO: 202), OsRAP1B (SEQ ID NO: 244), OsMADS6 (SEQ ID NO: 236), OsFDRMADS8 (SEQ ID NO: 228), OsMADS3 (SEQ ID NO: 232), OsMADS5 (SEQ ID NO: 234), OsMADS15 (SEQ ID NO: 240), OsHOS59 (SEQ ID NO: 258), OsGF14 c (SEQ ID NO: 278), OsDAD1 (SEQ ID NO: 292), Os006819-2510 (SEQ ID NO: 296), OsCRTC (SEQ ID NO: 300), OsSGT1 (SEQ ID NO: 310), OsERP (SEQ ID NO: 312), OsCHIB1 (SEQ ID NO: 318), OsCS (SEQ ID NO: 322), OsPP2A-2 (SEQ ID NO: 330), and OsCAA90866 (SEQ ID NO: 336), wherein the binding of the polypeptide in the yeast two hybrid assay to the fragment of a protein of SEQ ID NO: 210 is indicative that the polypeptide is a proliferation-related polypeptide; and
- (ii.) expressing the polypeptide in the cell, whereby proliferation of the plant cell is modulated.

55. (Currently amended) The method of claim 54, wherein expression of the polypeptide in the cell results in an enhancement of a rate

Serial No.: 10/533,232

or extent of proliferation of the cell compared to a cell not introduced with an isolated nucleic acid molecule encoding a cell proliferation-related polypeptide.

57. (Currently amended) The method of claim 54, wherein the ~~isolated nucleic acid molecule comprises a fragment of a protein of SEQ ID NO: 210 is encoded by the~~ nucleic acid sequence of SEQ ID NO: 209 ~~selected from one of odd numbered SEQ ID NOs: 1-339.~~